

\$10–\$35, respectively. In a group-based delivery scenario, vaccination was cost-saving compared to no vaccine and remained so if the vaccine cost was <\$28/dose (the break-even price). In the individual-based scenario, vaccination was cost-saving if the cost was <\$5/dose. In this scenario, nearly half of lost productivity in the vaccine group was attributable to visits to administer the vaccine, which overshadowed the relatively modest savings in ILI-associated costs averted. **CONCLUSIONS:** Routine use of intranasal influenza vaccine among healthy children may be cost-effective and may be maximized by using group-based vaccination approaches.

## ID4

#### THE CONFUSION BETWEEN SEPTICEMIA AND SEVERE SEPSIS

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**INTRODUCTION:** The American College of Chest Physicians/Society of Critical Care Medicine Consensus Conference defined severe sepsis as a systemic inflammatory syndrome in response to infection associated with acute organ dysfunction. Often, septicemia codes have been used in administrative datasets as a proxy for severe sepsis. However, these entities are not necessarily the same and one study found large differences in mortality between septicemia patients with and without severe sepsis (54% vs. 15%). We explored the accuracy of septicemia codes as identifiers of severe sepsis. **METHODS:** We selected all patients with septicemia or severe sepsis (bacterial or fungal infection plus acute organ failure) in the 1996 Florida hospital discharge database (n = 1,936,479) and compared differences between the groups. Septicemia was defined using the ICD-9-CM code 038.xxx. We defined severe sepsis using a more sophisticated strategy previously validated against prospective clinical and physiologic criteria. **RESULTS:** We found 58,598 patients with severe sepsis, 53.4% of whom were in the intensive care unit (ICU). We found 57,875 patients with septicemia, 30.9% of whom were in the ICU. Patients with severe sepsis had a higher mortality (24.1% vs. 18.0%,  $p < 0.001$ ) and higher hospital costs (\$20.4k vs. \$14.4k,  $p < 0.001$ ). For patients with an ICU stay, hospital mortality was 14.4% among the 7,927 septicemia cases without severe sepsis, 23.5% among the 21,655 cases of severe sepsis without septicemia and 42.1% among the 9,970 cases of severe sepsis with septicemia. The mean hospital cost in these three groups was \$18,381, \$24,396, and \$33,470 respectively. Of all selected patients (n = 99,126), 17.5% met criteria for both septicemia and severe sepsis. The sensitivity and positive predictive values of septicemia codes as predictors of severe sepsis are 29.6% and 30.0% respectively. **CONCLUSIONS:** Septicemia codes are not accurate for identifying patients with severe sepsis.

## MENTAL HEALTH

## MH1

#### THE IMPACT OF SECOND-GENERATION ANTIPSYCHOTIC MEDICATIONS ON AMBULATORY PATIENTS WITH SCHIZOPHRENIA

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**BACKGROUND:** The Medi-Cal program in California added second-generation antipsychotic medications to its formulary in October 1997. **OBJECTIVE:** Investigate the impact of the formulary expansion on patient outcomes for olanzapine and risperidone patients before and after the formulary expansion. **STUDY POPULATION:** The study population consisted of 13,106 olanzapine and 15,718 risperidone ambulatory patients from the 100% Medi-Cal dataset, who were classified into 3 groups. New: no previous antipsychotic drug therapy history. Restarters: re-started antipsychotic drug therapy while not on active therapy. Switcher: who switched to one of these products while on active drug therapy. **METHODS:** Models of one-year treatment costs were estimated using both OLS regression and propensity score methods. Models included over 85 covariates for patient demographics, prior use of services, prior antipsychotic drug profile and diagnostic profile. Separate models were estimated for the 3 patient populations. Outcomes include total costs over one year broken down into component costs and days of uninterrupted drug therapy achieved after re-starting therapy. **RESULTS:** The formulary expansion immediately increased the number of new, switcher, restarter patients starting therapy with risperidone and olanzapine. Olanzapine patients were more likely to be male, between the ages of 30 and 60, urban residents and AFDC recipients. For restarters and switchers, Olanzapine patients also appear to be more compliant with their prior antipsychotic drug regimen. Once these differences were accounted for, Risperidone and olanzapine patients exhibited similar treatment cost profiles in the post-expansion period. **CONCLUSIONS:** More research is needed to determine if the formulary expansion reduced the cost of treating patients with schizophrenia. Furthermore, future comparison across drugs must take into account potential treatment selection bias and formulary expansion effects on the decision to start drug therapy.

## MH2

#### FUTURE EMPLOYABILITY: A NEW APPROACH TO COST-EFFECTIVENESS ANALYSIS OF ANTIPSYCHOTIC THERAPY

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**OBJECTIVE:** Antipsychotic therapies are often evaluated on the basis of clinical endpoints (BPRS, PANSS) and measures of direct cost. However, schizophrenia patients